

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017423**Date Inspected:** 15-Oct-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Lv Li Qing**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance(QA) Inspector Mr.Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. The QA Inspector observed and/or found the following:

**ULTRASONIC TESTING****BAY # 10**

This QA Inspector performed Ultrasonic Testing (UT) of North Tower Lift 5 grillage welds D-E corner weld NSD1-TL5-3B-F-2, 36. UT was performed on the compression area as in accordance with AWS D1.5-2002, section 6, table 6.4. No any rejectable indications were observed at the time of testing.

**OUTSIDE YARD**

This QA Inspector performed Ultrasonic Testing (UT) of East Tower Lift 5 grillage welds D-E corner weld ESD1-TL5-2BF-23, 41. UT was performed on the compression as in accordance with AWS D1.5-2002, section 6, table 6.4. No any rejectable indications were observed at the time of testing.

This QA Inspector performed Ultrasonic Testing (UT) of South Tower Lift 5 grillage welds D-E corner weld SSD1-TL5-1B-F-22, 53. UT was performed on the compression area as in accordance with AWS D1.5-2002, section 6, table 6.4. No any rejectable indications were observed at the time of testing.

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This QA Inspector randomly observed the following work in progress.

BAY # 14

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066203 performing the Flux Cored Arc Welding process on weld 109 located at PCMK CA3013B. ZPMC QC Mr. Lv Li Qing was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2133.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066041 performing the Flux Cored Arc Welding process on weld 014 located at PCMK CA3013B. ZPMC QC Mr. Lv Li Qing was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2133.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 044824 performing the Flux Cored Arc Welding process on weld 033 located at PCMK AP3009-001. ZPMC QC Mr. Lv Li Qing was monitoring this welding operation. The welding variables recorded by QA appeared to comply with WPS-B-T-2132-Tc-u4b-f.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 044801 performing the Flux Cored Arc Welding process on weld 036 located at PCMK AP3010-001. ZPMC QC Mr. Lv Li Qing was monitoring this welding operation. The welding variables recorded by QA appeared to comply with WPS-B-T-2132-Tc-u4b-f.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 044774 performing the Flux Cored Arc Welding process on weld 071 located at PCMK VP3007-001. ZPMC QC Mr. Zhong Guo Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-Tc-u4b-f.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067079 performing the Flux Cored Arc Welding process on weld 029 located at PCMK VP3007-001. ZPMC QC Mr. Zhong Guo Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-Tc-u4b-f.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 202122 performing the Flux Cored Arc Welding process on weld 045 located at PCMK SA3168-001. ZPMC QC Mr. Wang Jie was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-3132.

This Quality Assurance (QA) Inspector observed fit-up was in progress for floor beam FB3207, FB3211 and FB3216.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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## WELDING INSPECTION REPORT

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### Summary of Conversations:

No significant conversations were reported on this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Utekar,Shrikant

Quality Assurance Inspector

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**Reviewed By:** Peterson,Art

QA Reviewer